**Tornadoes**

* They form when a warm wind meets a cold wind and they start to move around each other creating a spinning vortex.
* A funnel like a corkscrew will come down from the bottom of the storm clouds and can reach the ground. Winds can whirl around up to 300 miles per hour.
* Tornadoes may last just a few seconds or move miles across land for hours at a time.
* Although tornadoes can occur anywhere, certain regions are more prone. Oklahoma City, an area is known as Tornado Alley because it has more tornadoes than any other place on earth.
* Some people are so fascinated by tornadoes that they follow them and watch their development. These ‘Storm Chasers’ have allowed us to learn more about how and where tornadoes form and the damage they can cause.

**Heat Wave**

* The term heat wave is used to describe a period of very hot weather. It is accepted that temperatures above 27ºC 80ºF constitutes a heat wave.
* Heat waves are due to buildings, roads, and other infrastructures absorbing solar energy, resulting in higher temperatures.
* Heat waves can cause blackouts and power outages, especially in areas that experience the urban heat. Extreme heat can cause cramps, swelling, and fainting.
* Wild fires were a major hazard in rural areas and, air pollution and smog levels were high due to increased sunlight and car fumes.
* In, France the death toll totaled 11,000; mainly elderly people who could not withstand temperatures reaching 40ºC. Speed restrictions were enforced on train lines in southern England during the middle of the day over fears that the rails may buckle in the heat.

**Hurricane**

* A tropical storm is classified as a hurricane when wind speeds reach 74 miles per hour, though hurricane winds can be much faster.
* The center of a hurricane is called and eye’, where winds are light and cloud is broken. All tropical storms have been given names so they can be identified quickly and told apart.
* The first storm of the year will be given a name beginning with A for example Alexandra, the next with B etc. Only women’s names were used in the past, but from 1979 alternate male and female names have been used.
* A hurricane may start as a small thunderstorm over a warm tropical ocean. If the water is warm enough over 24ºC, a few storms may join together to create one larger storm.
* Where and when a hurricane is going to develop can still not be predicted. However, once a large storm or hurricane has formed, its path can be tracked. Satellites and radar are important in hurricane forecasting airplanes can be used to fly through and over hurricanes to conduct research.

**Electric Storms**

* A thunderstorm also known as an electric storm is formed when dry air and friction creates a buildup of energy, which results in a storm.
* Thunder is the rumbling or crack of sound that can usually be heard from the sky during a storm. Thunder is caused because lightning heats up the air, to about 30 000ºC, causing it to expand quickly.
* It is estimated that about 2000 thunderstorms are happening across the world at any time. Thunderstorms have their importance in the world, bringing regions much needed rainfall, however they can also be a destructive forces and a risk to life.
* An estimation of how far away a storm is by counting the number of seconds between a lightning flash and the start of thunder. If you divide this number by five, the answer is how many miles away the storm is from you.

**Floods**

* Flooding can be defined as any area of land covered by water; Rain is the most important factor in flooding. How much rain, how heavy and for how long it falls will all have an impact on the level of flooding.
* What happens to the rain once it hits the land can also decide which areas will flood. An Example Dam failure, triggered by an earthquake, will result in flooding downstream area, even in dry weather conditions.
* Water flows much faster over pavements and concrete than grass and soil.
* Most of the world’s flash floods occur in mountains where small streams.

**Snow and Ice Storms**

* A winter storm is an event in which precipitation is formed that only occurs at low temperature such as snow or sleet. This allows ice tor form.
* The winds can blow snow across land creating large snowdrifts capable of blocking roads and completely covering trains and cars, trapping people inside.
* It is often places not used to such condition that are worse affected. Example: The United Kingdom is one country caught out by unexpected snowstorms, largely because they are so rare.
* Snow is one of the most exciting weather events that can occur during the winter months. The extreme weather version of a few flakes of snow is a snowstorm, called a blizzard.

**Ice Storms**

* Freezing rain however can create some very different hazardous conditions. If snowflakes melt as they fall, but do not have the time to refreeze, they will freeze to whatever surface they hit as long as it is cold enough.
* Ice storms are a result of heavy freezing rain, and usually occur with big winter storms and big temperature changes
* The Canadian city of Montreal suffered weather disaster. At ground level the air was just below freezing, but the jet stream brought moisture over the top, which created rain. This ice storm brought down 80,000 miles of power lines across Quebec, while 15,000 people were housed in shelters in Montreal. This ice storm is on record as being the most devastating in history.

**Droughts**

* Drought is one weather extreme which is not due to too much of something, but because there is too little rain.
* A drought can be defined as a continuous and long period in which rainfall is significantly below the average expected for a region at that time of year.
* Drooping, shriveled crops, dry river channels, reservoirs and starvation amongst people are all possible impacts of drought
* In the UK a drought is when there is no more than 0.25mm 0.01 in of rain each day, for 15 days in a row. Minor droughts may happen during dry, hot summers and not last for very long. However, in some parts of the world droughts can last months, years and even decades.